

CLAIMS:

What is claimed is:

1. An image forming apparatus comprising:

a printing unit which prints an image on paper;

an exit member to push the paper out of the image forming apparatus;

an exit path which connects an exit of the printing unit to an exit member which pushes the paper outside of the printing unit; and

a plurality of guide members arranged widthwise of the paper, each guide member having a first guide side to guide the paper coming out of the printing unit along the exit path, wherein each guide member is movable such that the first guide side rotates when the first guide side is contacted by the paper coming out of the printing unit, and returns to an original position after the paper completely passes through the printing unit.

2. The apparatus of claim 1, further comprising a reverse path which branches out of the exit path between the exit of the printing unit and the exit member, so that the direction of the movement of the paper, which moves backward along the exit path, is reversed and again supplied into the printing unit when the exit member rotates in a reverse direction,

wherein each guide member further comprises a second guide side which guides the paper, which goes backward along the exit path, along the reverse path.

3. The apparatus of claim 2, further comprising a plurality of auxiliary guide members between the guide members, each auxiliary guide member including a first side and a second side, the first side being more distant from the rear side of paper than the first guide side and the second side being lower than the second guide side.

4. The apparatus of claim 1, wherein the guide members pivot independently from one another.

5. The apparatus of claim 1, wherein the guide members pivot together.

6. The apparatus of claim 1, further comprising first stoppers formed in the same direction as the pivoting direction of the guide members and respectively contact the guide members to be a predetermined distance away from the guide members.

7. The apparatus of claim 1, further comprising second stoppers which control the extent of the pivoting action of the guide members so that the guide members do not

pivot beyond the original positions when the guide members return to the original positions thereof.

8. The apparatus of claim 1, wherein the guide members return to the original positions thereof due to own weights thereof when the paper passes by the guide members.

9. The apparatus of claim 1, further comprising elastic members which apply elastic force to the guide members to make the guide members return to the original positions thereof.

10. The apparatus of claim 1, further comprising a plurality of auxiliary guide members between the guide members, each auxiliary guide member including a first side more distant from the rear surface of paper than the first guide side.

11. The apparatus of claim 2, further comprising:
a first frame on which the plurality of guide members are movably connected; and
a second frame positioned adjacent to a side of the first frame opposite to the plurality of guide members and forming a reverse path with the first frame.

12. The apparatus of claim 11, further comprising:

a feed roller positioned at the end of the reverse path to received the paper from the reverse path and feed the paper toward the printing unit to print an image on the reverse side thereof.

13. The apparatus of claim 2, wherein the plurality of guide members further

comprise as second guide side to guide paper towards the reverse path.

14. The apparatus of claim 1, wherein the first guide side has a shape of a straight

line.

15. The apparatus of claim 1, wherein the first guide side has a shape of a slight

curve to direct the paper toward the exit member.

16. The apparatus of claim 13, wherein the second guide sides of the respective

guide members are slightly higher than an upper surface of the first frame.

17. The apparatus of claim 11, further comprising plural pairs of combiners

attached to the first frame, each pair of combiners movably connecting the respective guide

member to the first frame.

18. The apparatus of claim 17, wherein the plural guide members each comprise axes formed at both surfaces thereof to engage with a respective combiner to movable attach the plural guide member to the first frame.

19. The apparatus of claim 18, wherein there are five guide members connected with the first frame.

20. The apparatus of claim 13, wherein the second guide side or each guide member extends from an end of the first frame toward the reverse path.

21. The apparatus of claim 20, further comprising recessed portions aligned with respective guide members and formed at end of the first frame such that movement of the second sides of the guide members are not restricted by the end of the first frame.

22. The apparatus of claim 10, wherein the auxiliary guide members are formed as ribs of the first frame.

23. The apparatus of claim 22, wherein each of the ribs comprises:
a first rib side positioned more distant from the rear surface of the paper than the first guide side to guide the paper in the forward path; and
a second rib side positioned lower than the second guide side to guide the paper in the reverse path.

24. The apparatus of claim 21, wherein the guide members are formed to pivot towards the first frame.

25. The apparatus of claim 24, wherein the guide members have a center of gravity off center.

26. The apparatus of claim 1, further comprising tension coil springs each connected to a respective guide member and the first frame to force the guide members to pivot slightly when contacted by the paper and then return to an original position.

27. The apparatus of claim 20, further comprising first stoppers formed at end of the first frame such that movement of the second sides of the guide members are not restricted by the end of the first frame.

28. The apparatus of claim 21, further comprising second stoppers to prevent the guide members from excessively moving beyond the original position when returning thereto.

29. An image forming apparatus comprising:

a printing unit to print an image on a recording medium and forward the recording medium through the image forming apparatus;

a exit path member to push the recording medium out of the image forming apparatus; and

a flexible guide member having a first guide side, the flexible guide member flexing to guide the recording medium toward the exit path member when the recording medium exits the printing unit and contacts the first guide side.